zone planning, wasteland management, water resources management, ocean/marine resources survey and management, urban development, mineral targetting forest resources survey and management.

(e) and (f). The Department of Space is pursuing with Central and State agencies for setting up of more remote sensing facilities to meet their specific needs as part of its activities towards establishment of National Natural Resources Management System in the country.

Training Programmes for Computer Scientists

*683. SHRI VIRENDRA SINGH: Will the PRIME MINISTER be pleased to state:

(a) whether the Government have worked out some training programmes for the computer scientists to familiarise them with grammar and techniques of semantic interpretation as found in the shastric Sanskrit;

(b) if so, the details thereof and the centres where such training is to be imparted;

(c) the details of the scheme, if any, to introduce such a training module as a part of formal B. Tech. or B.E. programme in computer science; and

(d) the technical institutions identified for offering such a subject as a part of graduate curriculum of computer science?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) The Department of Electronics under its Technology Development for Indian Languages (TDIL) Programme has initiated a scheme for Preparation of curriculum guidelines and course materials for introduction of Sanskrit Vyakaran, Nyaya, Mimamsa and Nirukta to linguists and Computer Scientists.

(b) The programme has been initiated at the following four institutions:-

(i) Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi.

(ii) Rashtriya Sanskrit Vidyapeeth, Tirupati.

(iii) Gurukul Kangri University, Hardwar.

(iv) Sampurnanand Sanskrit University, Varanasi

(c) and (d). There is no scheme at present to introduce training as a part of the formal B. Tech./BE curriculam of computer science.

Standard code for Computers and Electronic Teleprinters

*684. PROF. PREM DHUMAL: Will the PRIME MINISTER be pleased to state:

(a) whether the standard code for computers and electronic teleprinters has been finalised;

(b) if so, the details thereof;

(c) if not, the reason therefor; and

(d) the time by which the code for bilingual data processing are likely to be changed and the strategy evolved to replace the machines having the old codes?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) to (c). The Bureau of Indian Standards has prepared a draft on

"Indian Script Code" for Information Interchange (ISCII) which can be used for computers and teleprinters. These codes address the requirements of the officially recognised Indian Languages apart from English. The draft specification has been circulated to concerned authorities for their technical observations before it is finalised.

(d) Replacement of the machines are not envisaged for introducing the Standard Code. In Personal Computers, Codes for Bilingual Data Processing can be implemented using specially designed hardware and software which are already available.

Scientific and Technical Manpower Utilisation

*685. DR. LAXMINARAYAN PANDEYA: Will the PRIME MINISTER be pleased to state:

(a) whether any study has been carried out for assessing Scientific and Technical manpower utilisation in basic research, engineering and technology; and

(b) if so, the salient recommendations made to improve the skilled manpower utilization?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) and (b). No, Sir. No such study has been carried out. However, a survey of degree holders and technical personnel has been conducted in 1981 alongwith Population Census. The Government have, from time to time taken measures to increase utilisation of scientific and technical manpower. Some of these measures are:-

i) Increase in outlay for science and technology sector in successive Five Year Plans;

ii) Creation of new scientific departments/organisations;

iii) Setting up of more centres of excellence/advanced studies in universities and academic institutions;

iv) Creation of core groups of professionals with necessary modern facilities required for pursuing reserved in new and frontier areas of science;

v) Delegation of enhanced administrative and financial powers to scientific institutions to improve working conditions of scientists.

Duplication of R & D Projects

*686. SHRI SANTOSH KUMAR GANGWAR: Will the PRIME MINISTER be pleased to state:

(a) whether the Government have conducted any study to assess the duplication in R & D projects being supported by various technical departments;

(b) if so, the details thereof; and

(c) the mechanism involved/proposed to ensure that there is no duplication of R & D Projects ?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) to (c). The Government has made an analysis to assess duplication of R & D Projects being supported by various technical departments, in order to evolve an Integrated approach to promoting R & D activities.